



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,221	12/11/2003	Alistair Hamilton	1166 / SYMBP167US	8007

23623 7590 09/30/2005

AMIN & TUROCY, LLP  
1900 EAST 9TH STREET, NATIONAL CITY CENTER  
24TH FLOOR,  
CLEVELAND, OH 44114

EXAMINER

BOATENG, ALEXIS ASIEDUA

ART UNIT PAPER NUMBER

2838

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/733,221	<b>Applicant(s)</b> HAMILTON ET AL.	
	<b>Examiner</b> Alexis Boateng	<b>Art Unit</b> 2838	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4/28/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: The words "cumber" and "some" on page 2 line 19 should be changed to cumbersome. The word "form" on page 10 line 10, should be changed to from.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 5, 6, 7, 29 are rejected under 35 U.S.C. 102 (b) as being anticipated by Kaite (U.S. 6,016,046).

**Regarding claim 1**, Kaite discloses a portable computing device (figure 1 item 103), comprising: a component that receives an electro-magnetic flux (figure 2 item 114) generated from an external source (figure 2 item 101); and a charging component that generates a charging current from the flux (figure 2 item 113), and charges a rechargeable power supply (column 2 lines 48 thru 52).

**Regarding claim 5**, Kaite discloses a controller that monitors a state of charge of the rechargeable power source (figure 2 item 123; column 3 lines 20 thru 22).

**Regarding claim 6**, Kaite discloses the rechargeable power source being at least one of a fuel cell, a capacitor, a super capacitor, and a rechargeable battery cell (column 4 lines 55 thru 56).

Art Unit: 2838

**Regarding claim 7**, Kaite discloses wherein the controller determines a charging time for the portable unit and allocates a charge time thereto (column 6 lines 37 thru 41).

**Regarding claim 29**, Kaite discloses a charger system for charging a portable unit comprising: means for creating a magnetic flux (figure 2 items 115 and 113); and means for receiving a magnetic flux (figure 2 item 114), the receiving means operatively connected to a rechargeable power source of the portable unit (figure 2 item 120) so as to create an electric current during an opportunistic charge of the portable unit (column 5 lines 34 thru 45).

4. Claims 9 - 13, 17 - 19, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Goto (U.S. 5,600,225).

**Regarding claim 9**, Goto discloses a method of charging a portable unit comprising: providing at least one primary induction assembly (figure 2 item 103 and 104) with a primary winding (figure 2 item 103) configured to create a magnetic flux; providing a second pick up induction assembly (figure 2 items 212 and 211) coupled to a rechargeable power supply (figure 2 item 210) of a portable unit (figure 2 item 2); the magnetic flux extendable in to the second pick up induction assembly (column 4 lines 22 thru 33); and opportunistically recharging the power supply via a current created in the second induction assembly from the magnetic flux (column 4 lines 22 thru 33).

**Regarding claim 10**, Goto discloses a method of opportunistically recharging the power supply without deactivating the portable unit (column 4 lines 49 through 67).

**Regarding claim 11**, Goto discloses the method of immediately recharging the power supply, when the magnetic flux extends in to the second pick up assembly (column 4 lines 13 thru 34).

**Regarding claim 12**, Goto discloses providing a controller to control at least one of the primary induction and the secondary induction assembly (figure 2 item 209).

**Regarding claim 13**, Goto discloses triggering an event to energize the primary winding (figure 2 item 106; column 4 lines 13 thru 15).

**Regarding claim 17**, Goto discloses aligning the second induction assembly in close spatial proximity to the first induction assembly (figure 2 items 1 and 2).

**Regarding claim 18**, Goto discloses carrying the first induction assembly by a member of a group; and approaching the member when an opportunistic recharge is required for portable units of other members (figure 1 items 1 and 2).

**Regarding claim 19**, Goto discloses a charging system for a portable unit comprising: a primary induction assembly (figure 2 item 103 and 104) with a primary coil (figure 2 item 103) coupled to a primary power source; and a secondary induction assembly with a secondary coil coupled to a rechargeable power source (figure 2 item 210) of the portable unit; the magnetic flux of the first primary induction assembly extendable to the secondary induction assembly (column 4 lines 22 thru 33) so as to provide the rechargeable power source a charging current that is inductively created via the magnetic flux during an opportunistic charging of the portable unit (column 4 lines 22 thru 33).

Art Unit: 2838

**Regarding claim 24**, Goto discloses the controller determining a charging time for the portable unit and allocates a charge time thereto (figure 2 item 209).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaite (U.S. 6,016,046) in view of Ishii (U.S. 5,070,293).

**Regarding claim 2**, Kaite does not disclose wherein the portable computing device of claim 1 further comprises a bar code scanner. Ishii discloses in the abstract wherein the portable device is a bar code scanner. At the time of invention, it would have been obvious to a person of ordinary skill in the art to make the portable device comprise a bar code scanner so that it the scanner is mobile which makes it easier to scan a wide range of materials.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaite (U.S. 6,016,046) in view of Burton (U.S. 6,917,182).

**Regarding claim 3**, Kaite does not disclose wherein the portable computing device comprises an artificial intelligence (AI) component that infers and/or determines when the power supply should be recharged. Burton discloses in column 5 lines 65 thru column 6 line 11 wherein microprocessor 262 is used to

Art Unit: 2838

control when the device should be charged. At the time of invention, it would have been obvious to a person of ordinary skill to implement an artificial intelligence component to determine when charging is necessary so that the device is prevented from completely being harmfully discharged.

8. Claims 4 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaite (U.S. 6,016,046) and Goto (U.S. 5,600,225) in view of Kodama (U.S. 5,805,998).

**Regarding claims 4 and 26,** Neither Kaite nor Goto disclose wherein the portable computing device comprises a notification component that notifies the user that the device should be exposed to the external flux source. Kodama discloses in figure 5 and in column 9 line 66 thru column 10 line 16 where when the voltage drops below a predetermined level, an LED in the portable device turns on to notify the user of a low battery voltage. At the time of invention, it would have been obvious to a person of ordinary skill in the art to implement a notification device of when the battery needs to be charged so that it the user can recharge the battery when it is at a low voltage.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaite (U.S. 6,016,046) in view of Goto (U.S. 5,600,225).

**Regarding claim 8,** Kaite does not disclose wherein a notification component alerts a user of the power status of the rechargeable power supply. Goto discloses in column 4 lines 49 through 67 where a light signal is provided to indicate the completion of charging so that its user knows when the portable device is fully charged and available for use. At the time of invention, it would have been obvious to a person of ordinary skill in the art to implement a

Art Unit: 2838

notification component that alerts the user of the power status of the rechargeable power supply so that its user knows when the portable device is fully charged and available for use.

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (U.S. 5,600,225) in view of Kaite (U.S. 6,016,046).

**Regarding claim 21**, Goto does not disclose wherein the controller comprises a sensor. Kaite discloses in figure 2 item 125 wherein a current sensing section is comprised within the controlling circuit. At the time of invention, it would have been obvious to a person of ordinary skill in the art, to implement a sensor in the controlling circuit of the system so that the circuit can sense different changes in the system and effectively regulate the process of charging and discharging within the system to prevent damages.

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (U.S. 5,600,225) in view of Fernandez (U.S. 6,184,651).

**Regarding claim 20**, Goto does not disclose wherein the charging system comprises a controller in wireless communication with the portable unit for monitoring a state of charge of the rechargeable power source. Fernandez discloses in figure 2 item 11 wherein the primary controller uses wireless feedback of control signaling. At the time of invention, it would have been obvious to a person of ordinary skill in the art to use wireless communication because the user does not have to worry about wires becoming worn out or damaged.



Art Unit: 2838

12. Claims 14, 15, 16 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (U.S. 5,600,225) in view of Lew (U.S. 6,608,464).

**Regarding claims 14, 15, 16 and 22,** Goto does not disclose wherein the sensor is at least one of a motion and a light sensor. Lew discloses in column 7 lines 20 thru 50 wherein solar cells are used to sense light and a motion trigger is used to generate a magnetic field thru the coils. At the time of invention, it would have been obvious to a person of ordinary skill in the art to implement the sensor as a motion and/or a light sensor that the charging can be manifested in different manners when a standard power source is unavailable.

13. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (U.S. 5,600,225) in view of Kaite (U.S. 6,016,046).

**Regarding claim 23,** Goto does not disclose wherein the rechargeable power source is at least one of a fuel cell, a capacitor, and a rechargeable battery cell. Kaite discloses in column 4 lines 55 thru 56 wherein a rechargeable battery cell is used. At the time of invention, it would have obvious to a person of ordinary skill in the art to use a fuel cell, a capacitor or a rechargeable battery cell for the system because they provide a more efficient manner in saving and supplying power to devices.

14. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (U.S. 5,600,225) in view of Lappi (U.S. 6,114,832).

**Regarding claim 25,** Goto does not disclose wherein at least one of the portable unit and the charger system is wearable around a user's body. Lappi discloses in figure 1 item 100 where the charger system is wearable around a user's body.

Art Unit: 2838

At the time of invention, it would have been obvious to a person of ordinary skill in the art to make the portable unit or the charger wearable to the user so that it is easier and more convenient to charge the portable unit.

15. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (U.S. 5,600,225) in view of Fernandez (U.S. 6,184,651) as applied to claim 20 as above and further in view of Koreis (U.S. 6,489,745).

**Regarding claim 27,** Neither Goto nor Fernandez disclose wherein the primary induction assembly is part of a flat pad. Koreis discloses in figure 1 item 12 wherein the primary induction coil is a flat panel assembly. At the time of invention, it would have been obvious to a person of ordinary skill in the art to implement the primary induction assembly in flat panel manner so that its use is more versatile and can be used in wide range of applications.

16. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto (U.S. 5,600,225) in view of Lappi (U.S. 6,114,832) as applied to claim 25 above and in further view of Utsunomiya (U.S. 6,327,127).

**Regarding claim 28,** Neither Goto nor Lappi disclose where a thermo-coupler is connected to a user's body for additionally recharging at least one of the primary power source and the rechargeable power source. Utsunomiya discloses in column 6 lines 5 through 14, wherein the body temperature from the user is used to generate an electric current to recharge the battery in the device. At the time of invention, it would have been obvious to a person of ordinary skill in the art to implement a thermocouple device to recharge the battery so that when a

Art Unit: 2838

standard power source, such as an AC current, is unavailable, the user's body temperature can be used continuously.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexis Boateng whose telephone number is (571) 272-5979. The examiner can normally be reached on 8:30 am - 6:00 pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Sherry can be reached on (571) 272-2084. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AB

 9/18/05  
MICHAEL SHERRY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800